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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,019	12/15/2003	Gary Lynn Hanley	CGT-120	4149

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EXAMINER	
OMGBA, ESSAMA	
ART UNIT	**PAPER NUMBER**
3726	

NOTIFICATION DATE	DELIVERY MODE
04/16/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/736,019	HANLEY, GARY LYNN	
	Examiner	Art Unit	
	Essama Omgba	3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 January 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 24, 2008 has been entered.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-7 and 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Esser et al. (US 2003/0148710) in view of Sangeeta et al. (US Patent 5,976,265).

With regards to claims 1-7, Esser et al. discloses a process of removing aluminide-containing material or a thermal barrier coating from a metallic substrate using a blasting process as non-abrasive process, see paragraphs [0033], [0043] and [0092]-[0098]. Although Esser et al. does not specifically disclose the non-abrasive blasting process being one that uses an air jet, however Sangeeta et al. discloses a process for removing an aluminide-containing material from a metallic substrate surface (col. 1, lines 11-19 and col. 2, lines 26-28), the method comprising directing an air jet at the aluminide-containing material on the substrate surface of the component, the jet

comprising non-abrasive particulate media such as glass beads, the average particle size being less than 500 microns, the air jet being directed at the aluminide-containing material at a pressure less than about 40 psi sufficient to remove the aluminide-containing material but insufficient to damage the substrate surface, see column 5, lines 54-67, column 7, lines 53-67 and column 8, lines 1-4. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have use the non-abrasive blasting process taught by Sangeeta et al., in the process of Esser et al., in order to remove thermal barrier coatings without damaging the underlying material. Regarding the recitation "non-degraded thermal barrier ceramic coating" in the preamble, that recitation has not been given patentable weight. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Furthermore the process of Esser et al. could also be applied to "non-degraded" coatings as disclosed in paragraphs [0067] and [0098].

For claims 28-30, Applicant should note that such bond coatings are conventional in the art.

4. Claims 8-27 and 32-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior art (AAPA) in view of Esser et al. and Sangeeta et al.

With regards to claim 8-27, Applicant, at pages 1-3 of the specification to be known as AAPA, discloses known methods of removing thermal barrier coatings from turbine blades as well as from laser drilled cooling holes in turbine hot section components. Known methods include waterjet blasting to remove barrier coating from components during manufacturing and repair, including air-cooled components, which creates wear and erosion of the underlying substrate. AAPA does not disclose directing an air jet at the thermal barrier coating on the substrate coating, the jet containing non-abrasive particulate media and being emitted from a nozzle at a low pressure insufficient to damage the substrate surface. However Esser et al. teaches a non-abrasive blasting process to remove thermal barrier coatings, see paragraphs [0033], [0043] and [0092]-[0098]. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used a non-abrasive blasting process to remove thermal barrier coatings in the method of AAPA, in light of the teachings of Esser et al., in order to remove the thermal barrier coating without damaging the underlying substrate. Although Esser et al. does not specifically disclose the non-abrasive blasting process being one that uses an air jet, however Sangeeta et al. discloses a process for removing an aluminide-containing material from a metallic substrate surface (col. 1, lines 11-19 and col. 2, lines 26-28), the method comprising directing an air jet at the aluminide-containing material on the substrate surface of the component, the jet comprising non-abrasive particulate media such as glass beads, the average particle size being less than 500 microns, the air jet being directed at the aluminide-containing material at a pressure less than about 40 psi sufficient to remove

the aluminide-containing material but insufficient to damage the substrate surface, see column 5, lines 54-67, column 7, lines 53-67 and column 8, lines 1-4. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have use the non-abrasive blasting process taught by Sangeeta et al. in the process of AAPA/Esser et al., in order to remove thermal barrier coatings without damaging the underlying material. Regarding the recitation "wherein said thermal barrier ceramic coating is not degraded" in claim 18, Applicant should note that Esser et al.'s process can also be applied to thermal barrier ceramic coatings that are not "degraded", see paragraph [0098].

For claims 32-36, Applicant should note that such bond coatings are conventional in the art.

Response to Arguments

5. Applicant's arguments filed January 24, 2008 have been fully considered but they are not persuasive.

In response to Applicant's argument that neither Esser nor Sangeeta provide teaching of any process by which a thermal barrier coating can be removed solely by the blasting of non-abrasive particles, the examiner respectfully disagrees. As outlined in the above rejections, Esser et al. teaches a process by which a thermal barrier coating can be removed solely by the blasting of non-abrasive particles, see paragraph [0098] of Esser et al. Also Sangeeta et al. is used to teach using non-abrasive glass beads in an air-jet to remove thermal barrier coatings.

In view of the above remarks, the examiner maintains that a *prima facie* case of obviousness has been established in the instant application.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Essama Omgba whose telephone number is (571) 272-4532. The examiner can normally be reached on M-F 9-6:30, 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Essama Omgba/
Primary Examiner, Art Unit 3726

eo
April 11, 2008